

Climate, Health & Equity: Practical Actions for Cities

Speakers:

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Hosted by National League of Cities,
for Climate Sustainability and
Resilience in Cities month



Air Pollution & Health



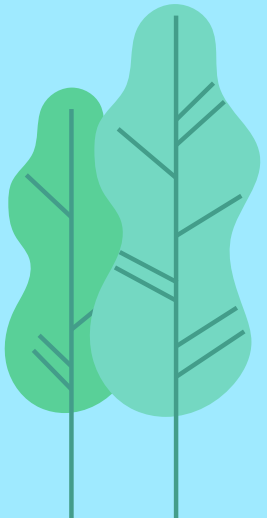
COMMON AIR POLLUTANTS



Ozone
Particulate
Matter

Nitrogen Oxide
Carbon
Monoxide

Volatile Organic
Compounds
Radon



...

↑ Extreme Weather Events =

↑ Harmful Air Pollutants =

↑ Adverse Health Effects



Photo by Josh Fields from Pexels

Health Impacts of Air Pollutants



Heart Disease



Respiratory Infections



Cognitive Development



Stroke



Depression & Anxiety



Cancer



Factors of Air Pollution Exposure

Proximity &
Neighborhood



Time & Season



Vulnerable
Demographics



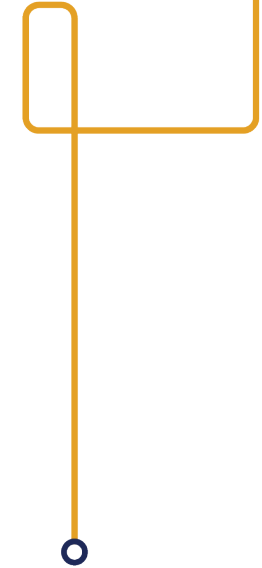
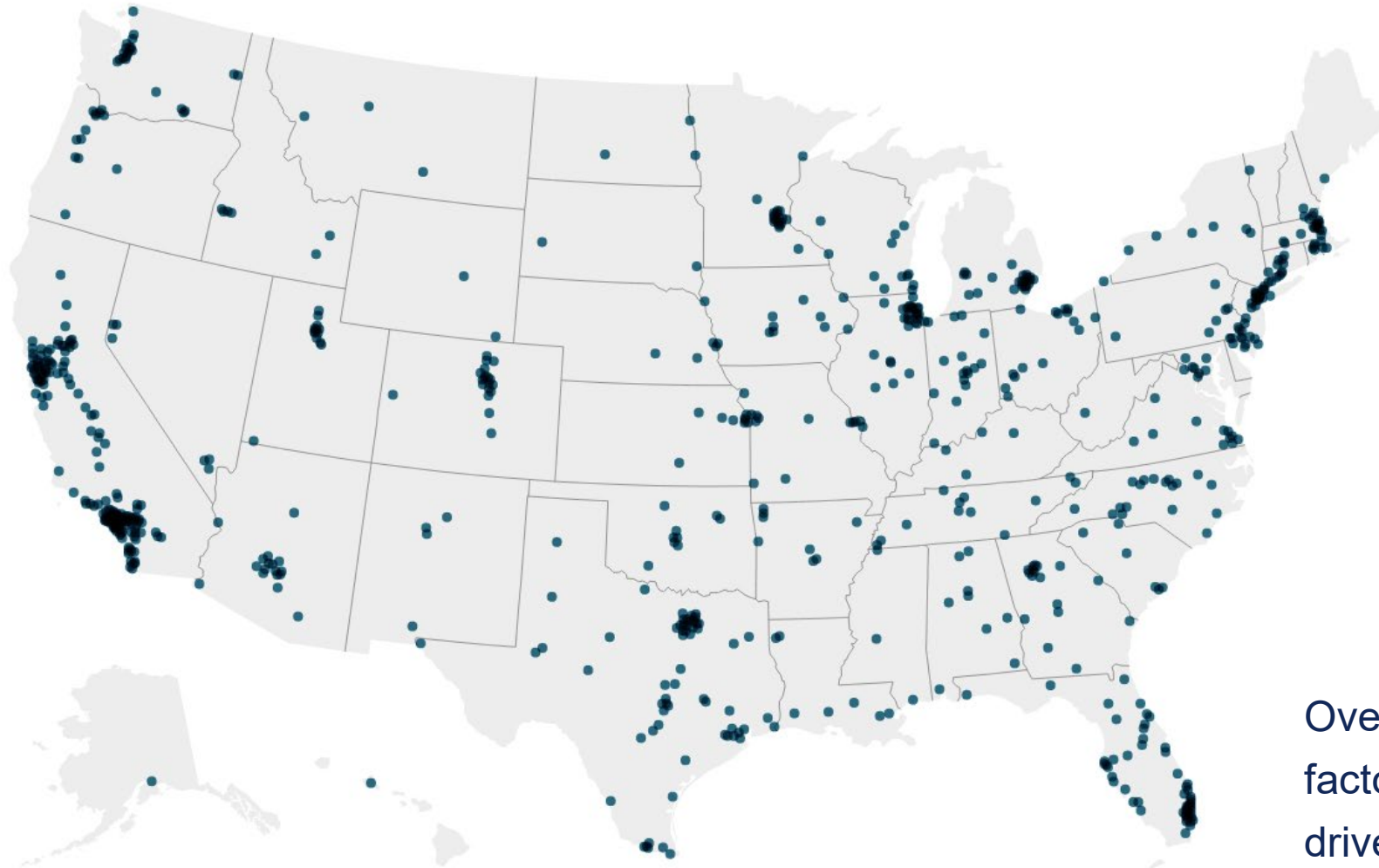


Climate, Health & Equity: Practical Actions for Cities

Becky Ofrane

Department of Population Health

NYU Grossman School of Medicine



Over 40 measures of health, the factors that shape health, and the drivers of health equity to guide local solutions for **750+ U.S. cities**.

A decorative orange line graphic consisting of a vertical line starting from a small circle at the top, extending down, then turning left to form a horizontal line, and finally turning right to continue as a vertical line down to the bottom of the slide.

Who uses the Dashboard?

- Mayors and City Managers
- Local health departments
- City government agencies
- Community organizations
- Health and education advocates
- Philanthropies
- Researchers and students
- Media

City Health Dashboard Measures by Category

HEALTH OUTCOMES

Breast cancer deaths
COVID Local Risk Index
Cardiovascular disease deaths
Colorectal cancer deaths
Diabetes
Frequent mental distress
Frequent physical distress
High blood pressure
Life expectancy
Low birthweight
Obesity
Opioid overdose deaths
Premature deaths (all causes)

SOCIAL & ECONOMIC FACTORS

Absenteeism
Broadband connection
Children in poverty
Credit Insecurity Index
High School Completion
Housing cost, excessive
Income inequality
Neighborhood racial/ethnic segregation
Racial/ethnic diversity
Third-grade reading proficiency
Unemployment – Current, City-Level
Unemployment – Annual, Neighborhood-Level
Violent Crime

CLINICAL CARE

Dental care
Prenatal care
Preventive services, 65+
Routine checkups, 18+
Uninsured

PHYSICAL ENVIRONMENT

Air pollution - ozone
Air pollution – particulate matter
Housing with potential lead risk
Lead exposure risk index
Limited access to healthy foods
Park access
Walkability

HEALTH BEHAVIORS

Binge Drinking
Physical Inactivity
Smoking
Teen Births

City level
City & neighborhood level

Metrics of Interest: Climate & Equity

Air Pollution – Ozone

- New! **Monthly** data from Jan 2018 – Dec 2020, census tracts
- Ground-level ozone, modeled by research partners at George Mason University, through NASA's HAQAST program
- Average daily maximum 8-hour concentration of ozone in the air (in ppb) over the course of a month

Air Pollution – Particulate Matter

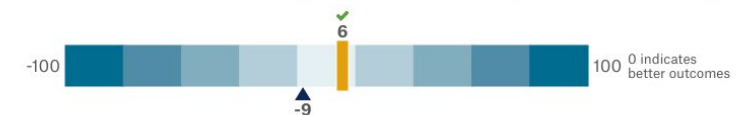
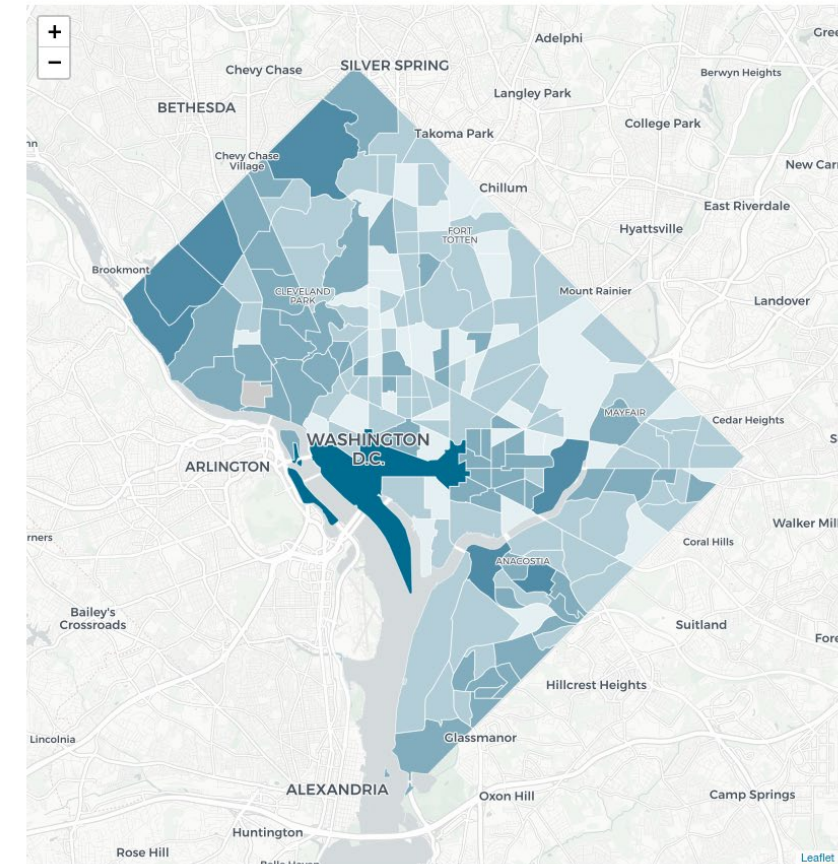
- Annual data, 2013 – 2018, census tracts
- Average daily concentration of fine particulate matter (PM2.5) per cubic meter (average)

Income Inequality

- Annual data, 2013 – 2019, census tracts
- Households with income at the extremes of the national income distribution (the top 20% or bottom 20%) (index)

Income Inequality in Washington, DC

Source: City Health Dashboard; Data from American Community Survey, 2019, 5 Year Estimate

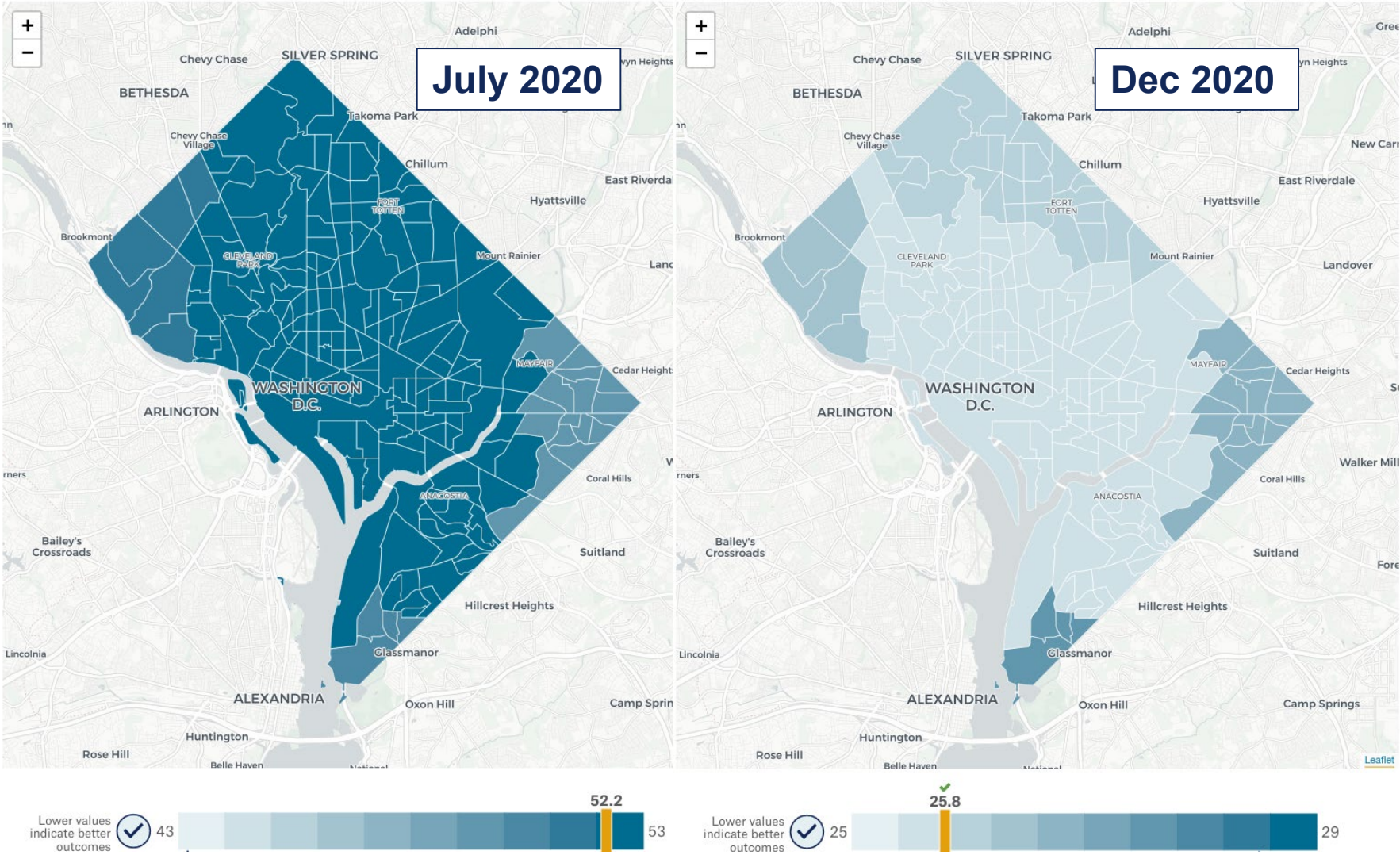


Washington had an income inequality score of 6, compared to an average of -9 across the Dashboard's cities.

City or census tract value ▲ Dashboard-City Average ✓ Present when value is better than Dashboard-City Average ☑ Better Outcomes

Seasonal Variation in Air Pollution – Ozone, Washington, DC

Source: City Health Dashboard; Data from George Mason University



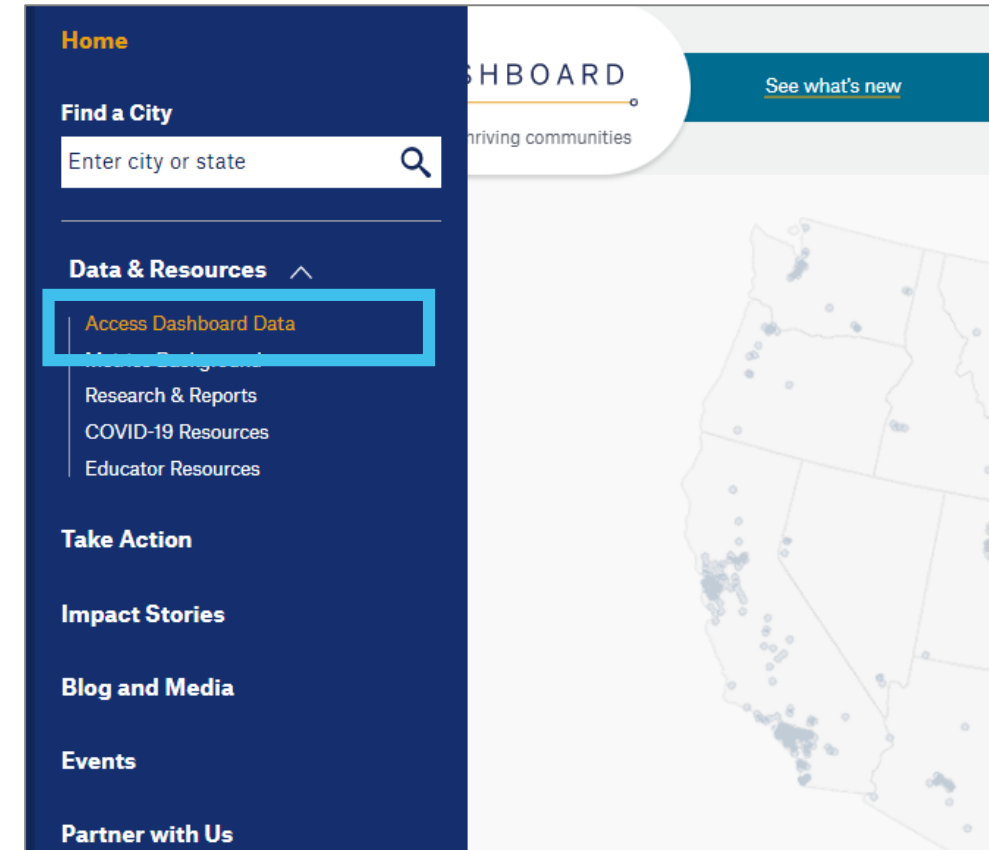
Access the Data

All Dashboard data is available for download

- Most recent year: .csv and .txt files
- Multi-year: API

Download complete Dashboard data for all cities or by state

Complete brief survey to access all data



Practical Actions for Cities American Cities Climate Challenge

National League of Cities
April 26, 2022
Irene Boland Nielson

WHAT IS THE AMERICAN CITIES CLIMATE CHALLENGE?

A Bloomberg Philanthropies initiative that aims to **accelerate** and **deepen** U.S. cities' efforts to create the greatest climate impact through 2020 and showcase the benefits – **good jobs**, **cleaner air**, and **cost savings** – that climate solutions bring.

25 CITIES ACROSS THE UNITED STATES



FOCUSING ON TWO LARGEST SOURCES OF EMISSIONS

BUILDINGS PATHWAYS



REDUCE
BUILDING
ENERGY USE



INCREASE
RENEWABLE
ENERGY



ELECTRIFY
BUILDINGS

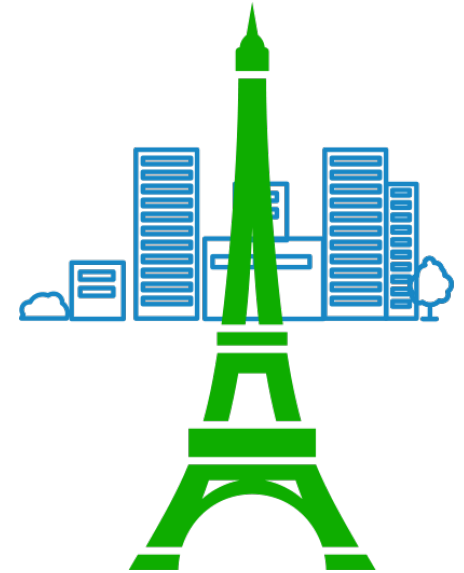
TRANSPORTATION PATHWAYS



REDUCE
VEHICLE MILES
TRAVELED



ELECTRIFY
VEHICLES



CITIES
REACHING
CLIMATE
GOALS

BUILDINGS AND ENERGY ACTIONS



FOUNDATIONAL

- Energy efficiency and retro-commissioning of municipal facilities
- Municipal electricity through renewables
- EV charging in municipally owned parking lots
- Energy code enforcement
- Building challenge programs
- Workforce development programs

AMBITIOUS

- Financing programs
- Benchmarking, audit, and retrocommissioning policy
- Performance standard for existing buildings
- EV and Solar readiness or installation requirement
- Community solar projects
- Local energy resource center

MOONSHOT

- Building decarbonization incentives and demonstration projects
- Building decarbonization through local codes

TRANSPORTATION ACTIONS



FOUNDATIONAL

- Improved Public Transit Speed, User Experience, Reliability
- Priority walking and bike networks
- EV education and incentives
- Bikeshare, scooter shares
- Commuter incentives to reduce driving
- Electrify city fleets and buses

AMBITIOUS

- Behavioral change for low-carbon mobility
- Fully implement bike and ped networks
- Parking management and pricing
- Pricing low emissions zones
- Expand high-frequency transit network

MOONSHOT

- Market transformation for community scale transition to EVs
- Eliminate parking requirements
- Build more housing near transit
- Ubiquitous EV charging infrastructure

The Climate Challenge has empowered cities to “beat the odds” and deliver on ambitious climate goals

Our cities will exceed Paris targets while delivering valuable co-benefits that improve residents' lives

32%

EXPECTED EMISSIONS
REDUCTION IN OUR 25
CITIES in 2025

49

MAJOR POLICIES
PASSED SINCE 2018

MAYORS DELIVERED IN 2019 AND 2020
changing markets, reducing emissions, and improving
quality of life in their communities



800

MW

renewable
energy under
contract or
pending



11,000

INCREASE

new electric
vehicle chargers
installed



800

WORKERS

residents
trained or
upskilled in
green jobs

1.2x

the Paris goal
of 26-28%

Climate Challenge cities passed 28 transportation policies and adopted 41 programs to advance low-carbon mobility



28

Transportation policies passed

Areas of impact

- Transforming streets for public transit
- Better biking and walking
- Accelerating vehicle electrification
- Winning funding for better mobility
- Putting equity at the center of transformative policies

466



Miles of new or improved bike lanes

37



Lane miles of bus/transit improved

70



Miles of sidewalk

1,020



New EVs in city fleet

Climate Challenge cities increased renewable energy for a cleaner electricity grid, improved building energy efficiency, and phased out fossil fuels



21

Buildings & Energy policies passed

Areas of Impact

- Renewable energy procurement
- Advanced energy-saving building policies for existing buildings
- Adopted reach codes for new construction
- Accelerating building electrification

400M



Sq. ft covered by benchmarking policies

37,000



Energy audits conducted

800



Residents trained or upskilled in green jobs

WE REDEFINED THE CLIMATE CHALLENGE'S NORTH STAR

How We Define High Impact

- Contribute to significant GHG reductions;
- Center historically underserved voices, especially Black and Brown voices, in policy design, development and implementation; and
- Deliver significant, co-defined benefits for these communities that lead to greater prosperity and will endure for the long term.

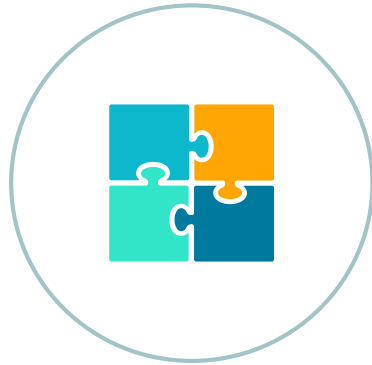
IN CITIES, WE SAW HOW KEY ELEMENTS CAME TOGETHER

Community Co-Creation



How cities moved towards power sharing and co-creation with communities of color

Local-partner Coalition Network



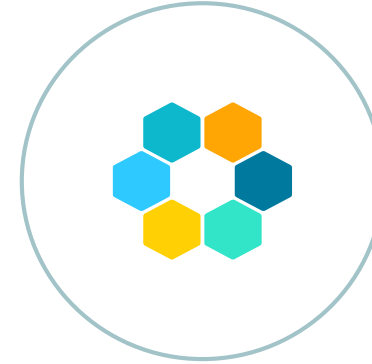
How local partners worked together and with the city to lead to change

Economic Inclusion & Recovery



How climate work was able to contribute to economic recovery and benefit communities of color

Cross-departmental & Mayoral Led Work



Where a change in city practice and community relationship was spurred by a strong mayoral commitment or where the work required working across institutional silos

Equity Metrics



Where community orgs work with cities to interpret and use equity indicator data



**Bloomberg
Philanthropies**

**American Cities
Climate Challenge**

CLIMATE ACTION PLAYBOOK BRIEF

A STRATEGIC BRIEF TO ACCELERATE AND DEEPEN CLIMATE ACTION IN CITIES

Read more>>

<https://assets.bbhub.io/dotorg/sites/2/2020/07/American-Cities-Climate-Challenge-Climate-Action-Playbook.pdf>

THANK YOU

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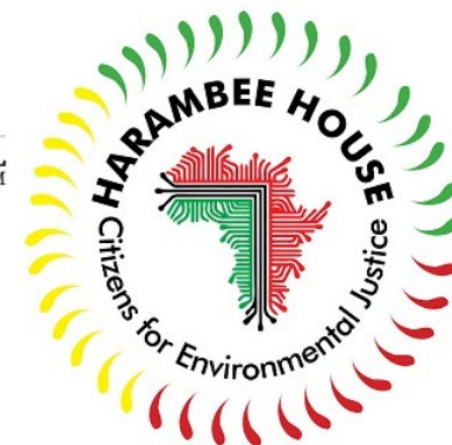


Leveraging Partnerships:

Atlanta's Approach to Tackling Urban Heat Island Effect

Atlanta's Office of Resilience

Urban Heat ATL

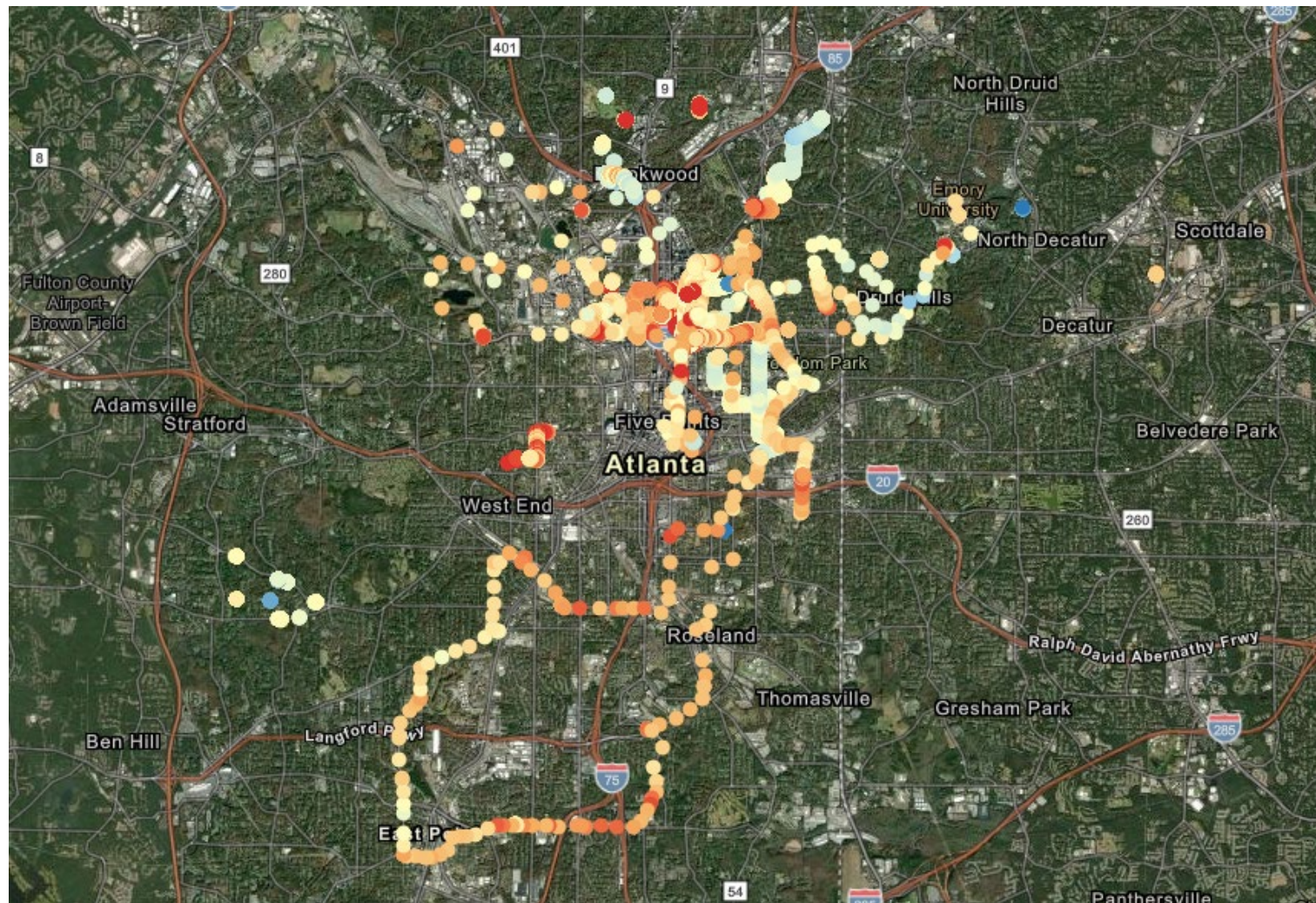


Global Change Program
Urban Climate Lab
Center for Serve-Learn-Sustain

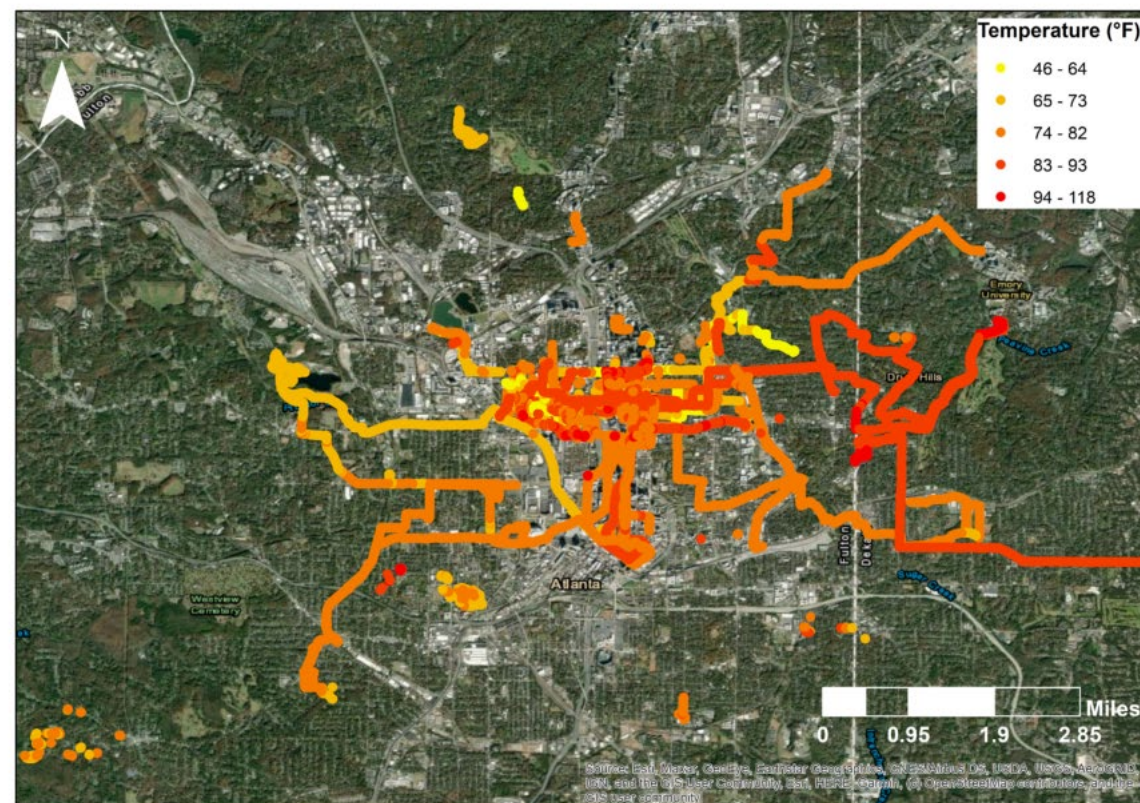


Urban Heat ATL

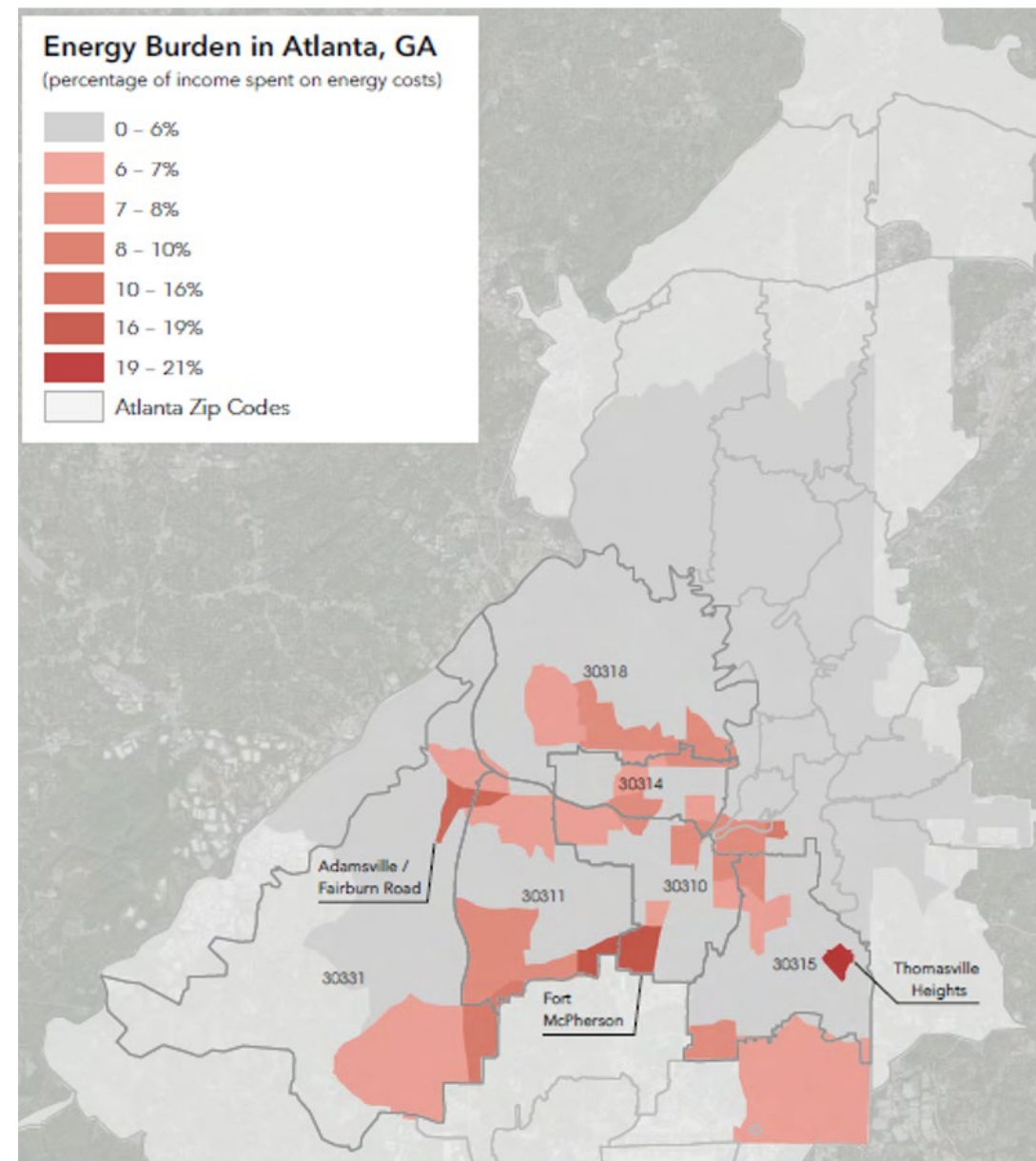
Volunteers have
collected over
1 million data points



Project Growth Over Time



Atlanta's Energy Burden



Atlanta's Climate Action Plan

Looking Ahead and Next Steps

A photograph of a forest with sunlight filtering through the trees, creating a bright, dappled light effect. The sun is visible in the upper left corner, creating a lens flare.

THANK YOU

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